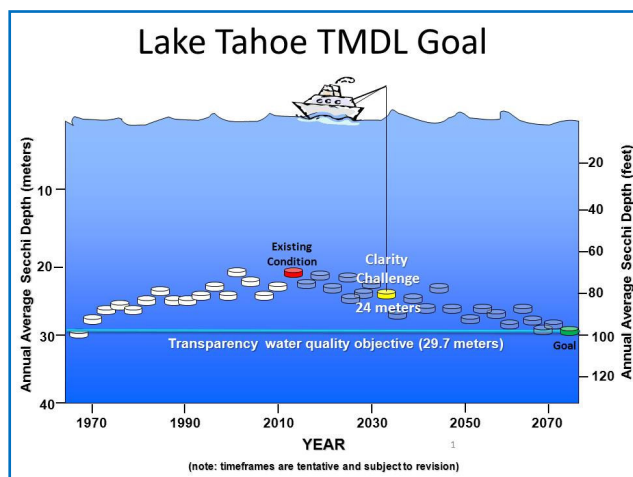


## The Lake Tahoe Total Maximum Daily Load (TMDL) – A Water Clarity Restoration Plan

Lake Tahoe's clarity is world renowned and well documented. As described in a companion fact sheet entitled "*Science to Improve Lake Tahoe's Water Quality and Clarity*," the Lake has experienced a decline in water clarity since the late 1960s. A plan to reverse this decline and restore deepwater clarity to historic levels—known as the Lake Tahoe Total Maximum Daily Load or TMDL—was recently adopted by the States of California and Nevada, and is anticipated to be approved by the U.S. Environmental Protection Agency (EPA) on August 16, 2011.



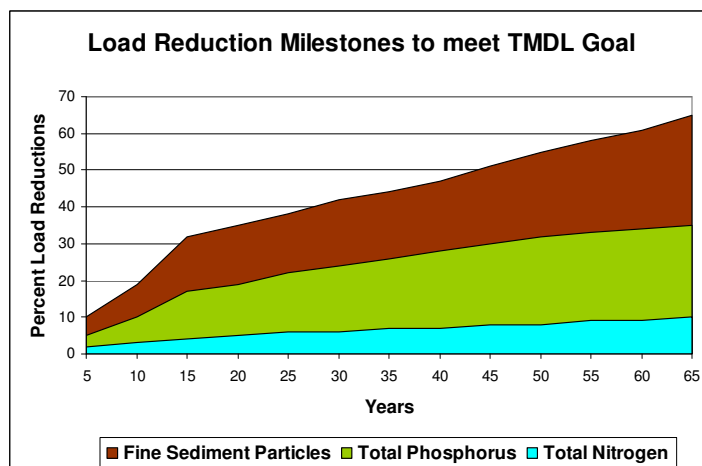
Following EPA approval, the TMDL implementation plan will guide restoration efforts for a number of sources of pollutants responsible for the clarity decline. The plan calls for fine sediment, phosphorus, and nitrogen pollutant load reduction projects to be implemented by state departments of transportation and local municipalities, land and stream resource management agencies, and air quality regulators. California's Lahontan Regional Water Quality Control Board (Lahontan Water Board) and the Nevada Division of Environmental Protection (NDEP) will provide continued oversight and support with technical and financial assistance from EPA.

### Background

The TMDL and its Implementation Plan are the result of a ten-year development effort funded by state and federal agencies. Both the scientific research and stakeholder input that underpin the final restoration plan are among the most advanced ever applied to a TMDL in the nearly 40-year history of the Clean Water Act.

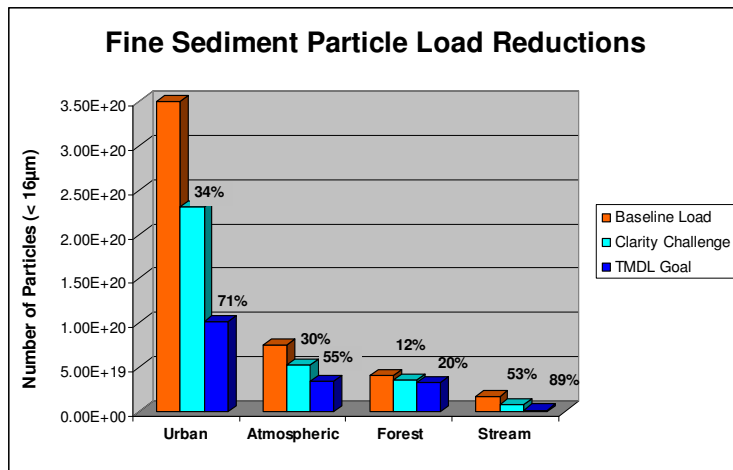
The Lake Tahoe TMDL:

- quantified the relative contributions of fine sediment, phosphorus, and nitrogen inputs to Lake Tahoe from major pollutant sources;
- quantified load reductions needed from the four largest sources (urban and forest stormwater runoff, stream channel erosion, and atmospheric deposition) to achieve both the TMDL numeric and interim (Clarity Challenge) targets of 29.7 and 24 meters respectively; and
- established a recommended strategy to achieve pollutant load reductions needed to restore lost clarity.



### ***TMDL Implementation***

Achieving the interim Clarity Challenge—load reductions expected to improve Secchi disk depth by nearly ten feet—will necessitate substantial reductions from all source categories, particularly urban stormwater runoff. The Lake Tahoe TMDL has blazed new ground by developing a comprehensive method for estimating, tracking and reporting progress from on-the-ground urban stormwater pollution control activities. Urban stormwater managers are expected to prioritize and implement needed load



reductions at the catchment or neighborhood scale, as well as to verify and obtain credit for these activities through the Lake Clarity Crediting Program. Load reduction estimation and tracking protocols are planned to be developed for all source categories, facilitating the evaluation and assessment of progress toward meeting load reduction goals and enabling greater transparency and accountability for the expenditures of public monies.

The TMDL has outlined many possible implementation actions to meet restoration goals, including: advanced roadway operations and maintenance practices, targeted street sweeping programs using high-efficiency street sweepers, infiltrate urban stormwater or treat using chemical and/or biological removal processes, stabilize and revegetate eroding slopes, remove impervious cover and restore soil infiltration capacity, reduce residential wood burning with incentive programs, mulch and revegetate ski runs, decommission and re-contour forest roads or retrofit them with best management practices, restore stream and wetland functionality, and reconnect streams with their floodplains. Continual improvement and adaptive management through the TMDL Management System will ensure the most targeted, cost-effective solutions are employed.

The Lake Tahoe Environmental Improvement Program (EIP) has provided critical initial steps to restoring Lake Tahoe clarity. However, the Lake Tahoe TMDL represents the next generation of EIP improvements that are needed to further advance progress toward water quality goals. This program relies on, and deserves, the continued commitment of federal, state, local and private sector partners in order to meet Lake Tahoe's restoration goals. Working together this goal can be accomplished.



### ***Where to go for more information***

Lahontan Water Board: <http://www.swrcb.ca.gov/rwqcb6/>

Nevada Division of Environmental Protection: <http://ndep.nv.gov/bwqp/tahoe.htm>

U.S. Environmental Protection Agency: <http://www.epa.gov/region9/water/watershed/tahoe.html>



